Ohio Agricultural Experiment Station

CIRCULAR No. 150

WOOSTER, OHIO, JANUARY 11, 1915

TREE FILLINGS AND WOUND DRESSINGS FOR ORCHARD AND SHADE TREES

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Asphaltum and Sawdust Filling for Cavities: The difficulties arising from the use of cement in filling cavities in orchard or shade trees are largely traceable to the rigid character of cement filling. The light color is at times likewise an objection to cement as a material for such fillings; it also lacks adaptability for use in swaying branches. For these reasons and others we have looked with favor upon the formulae for asphaltum and sawdust fillings, first originated and tested by Mr. John Boddy, City Forester, Cleveland, Ohio. The details briefly stated are as follows, all materials being designated by volume:

Materials: Dry sawdust of any variety, and solid asphaltum, such as "Byerlyte" and that used for fillings in brick pavements.

For Cavities in Swaying Branches: 1 part asphaltum to 3 to 4 parts sawdust. Moisten tools in Varnolene or possibly in crude oil. See below.

For Cavities in Trunks: 1 part asphaltum to 5 to 6 parts of sawdust. Moisten tools with Varnolene or crude oil. Stir sawdust into hot melted asphaltum until desired consistency is reached. Distribute sawdust, as added, evenly over surface of vessel to avoid boiling over. Apply in cavities while still hot. No joints or sheet paper separations are required as in cement fillings. If surfaces of fillings are irregular or lack uniformity of color, coat them with gas tar or liquid asphaltum.

In the preparation of cavities to be filled with sawdust and asphaltum, as with cement, or to be rendered antiseptic without filling, it is recommended that the decayed parts be removed to sound wood. This involves removal of all soft and rotten material; somewhat deeper cutting away seems advisable in shade trees than in fruit trees. It is further recommended that the interior surfaces be rendered sterile through the use of applications of corrosive sublimate, carbolineum or kerosene. It is not advisable to use creosote, because it is too penetrating for use next to living parts. The thoroughness with which the work of removal and disinfection is done will very largely determine the success of the fillings made. In case of very large cavities filled with asphaltum-sawdust mixture, it may be desirable to use an outer screen of close wire netting or of poultry netting. In any case the outer line of the filling will be kept more uniform by some surface, as of oil coated wood or metal, against which pressure is exerted as the filling is made. Finally, the irregular and general surace of the filling may be coated properly and successfully with gas tar or liquid asphaltum; either of these is a proper dressing for any border surfaces that may have been cut to secure contact with the filling.

It is to be noted that the solid asphaltum referred to in materials is that derived from the refining of petroleum with an asphaltum base. It can be stored and shipped in iron drums, and is the same as that used in filling the interstices of street pavements, and for many other purposes in recent years.

WOUND DRESSINGS

Gas Tar and Liquid Asphaltum: Experience has recently shown the practical value of gas tar and forms of liquid asphaltum as wound dressings. The relatively low cost of the gas tar, 15 to 20 cents per gallon, and certain of its qualities, render it adapted to use for wound dressings. This material is not without limitations. One of these is a certain difficulty in securing a continuous covering of sensible thickness with the gas tar. Apparently very good results are secured by using it in the semi-fluid or rather thick state, and this applies as well to forms of liquid asphaltum made with Varnolene, linseed oil, etc. While at times, especially in cooler weather, it is desirable to heat the gas tar, imperfect covering is secured with the very fluid, hot tar. After cooling in part, the more favorable condition is reached. In general, it would seem that two applications give more desirable results. The second of these

may be made after an interval of a few weeks or even a year. This material is often referred to as coal tar. Certain forms of thin or very fluid character used for roof coverings and as metal paints are not well adapted for use as wound dressings.

In general, pruning wounds less than one and a half inches in diameter scarcely require a covering. There may be cases, however, where heavy pruning is practiced, in which more general treatment of the wounds is advisable. The formulae for the preparation of forms of liquid asphaltum and the discussion of wound dressings are given in Circular 126, to which the reader is referred. The solid asphaltum has not proved successful as a wound covering.

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